

What is claimed is:

[Claim 1] An automotive center stack panel assembly comprising:

an inner retainer panel including a recessed display mount;
a video display panel assembly mounted to said recessed display mount, said video display panel assembly having a display angle orientation;
at least one roller guide formed on said inner retainer panel;
an outer main bezel having a bezel outer panel surface; and
a control panel positioned between said inner retainer panel and said outer main bezel, said control panel comprising a plurality of roller elements positioned within said at least one roller guide and retained therein by said outer main bezel, said control panel movable between a display hidden position and a display exposed position, said control panel covering said recessed display mount when in said display hidden position.

[Claim 2] An automotive center stack panel assembly as described in claim 1, wherein said control panel includes a control panel outer surface generally coincident with said bezel outer panel surface when said control panel is in both display hidden position and said display exposed position.

[Claim 3] An automotive center stack panel assembly as described in claim 1, wherein each of said plurality of roller elements comprises:

a pin assembly extending from said control panel; and
a roller bearing rotatably engaging said pin assembly.

[Claim 4] An automotive center stack panel assembly as described in claim 3, further comprising:

at least one upper engagement element frictionally engaging one of said pin assemblies when said control panel is in said display hidden position.

[Claim 5] An automotive center stack panel assembly as described in claim 3, further comprising:

at least one lower engagement element frictionally engaging one of said pin assemblies when said control panel is in said display exposed position.

[Claim 6] An automotive center stack panel assembly as described in claim 1, wherein said at least one roller element is hidden from view by said outer main bezel.

[Claim 7] An automotive center stack panel assembly as described in claim 1, further comprising:

a plurality of control buttons positioned on said control panel outer surface.

[Claim 8] An automotive center stack panel assembly as described in claim 1, wherein said video display panel assembly comprises a navigation system.

[Claim 9] An automotive center stack panel assembly as described in claim 1, further comprising:

an audio component positioned within said recessed display mount.

[Claim 10] An automotive center stack panel assembly as described in claim 1, wherein said display angle orientation is varied from said bezel outer panel surface to optimize occupant viewing angle.

[Claim 11] An automotive center stack panel assembly comprising:

an inner retainer panel including a recessed display mount;

a video display panel assembly mounted to said recessed display mount, said video display panel assembly having a display angle orientation;

at least guide formed on said inner retainer panel;

an outer main bezel having a bezel outer panel surface; and

a control panel positioned between said inner retainer panel and said outer main bezel, said control panel slidably engaging said at least one guide, said control panel movable between a display hidden position and a display exposed position, said control panel covering said recessed display mount when in said display hidden position.

[Claim 12] An automotive center stack panel assembly as described in claim 11, wherein said control panel includes a control panel outer surface generally coincident with said bezel outer panel surface when said control panel is in both display hidden position and said display exposed position.

[Claim 13] An automotive center stack panel assembly as described in claim 11, further comprising:

at least one upper engagement element mounted to said inner retainer panel, said at least one upper engagement element frictionally engaging said control panel when said control panel is in said display hidden position.

[Claim 14] An automotive center stack panel assembly as described in claim 11, further comprising:

at least one lower engagement element mounted to said inner retainer panel, said at least one lower engagement element frictionally engaging said control panel when said control panel is in said display exposed position.

[Claim 15] An automotive center stack panel assembly as described in claim 11, further comprising:

a plurality of control buttons positioned on said control panel outer surface.

[Claim 16] An automotive center stack panel assembly as described in claim 11, wherein said video display panel assembly comprises a navigation system.

[Claim 17] An automotive center stack panel assembly as described in claim 11, further comprising:

an audio component positioned within said recessed display mount.

[Claim 18] An automotive center stack panel assembly as described in claim 11, further comprising:

at least one heating-venting-air-conditioning vents formed through said inner retainer panel.

[Claim 19] A method of accessing a video display panel assembly within an automotive center stack panel assembly comprising:

sliding a control panel from a display hidden position to a display exposed position thereby exposing a video display panel assembly mounted within a recessed display mount, said control panel slidably engaged between an inner retainer panel and an outer main bezel, said control panel including a plurality of control buttons positioned on a control panel outer surface, said control panel outer surface coincident with a bezel outer panel surface; and

sliding said control panel from said display exposed position to said display hidden position to cover said video display panel assembly when said video display panel assembly is not in use, said control panel sliding parallel with said bezel outer panel surface.

[Claim 20] A method as described in claim 19, further comprising:

retaining said control panel between said inner retainer panel and said outer main bezel by rotatably securing a plurality of roller elements mounted to said control panel within a roller guide formed on said inner retainer panel.